



Plate 3. Top left—*Otus alius*, sp. nov., compared with the related taxa which it most closely resembles in plumage (all probably illustrated for the first time); top right—grey-morph *O. magicus tempestatis* (Wetar Island); bottom left—*O. [magicus] kalidupae* (Tukangbesi Islands); bottom right—*O. [m.] sulaensis* (Sula Islands). All other taxa are more dissimilar in aspect and hence are not illustrated. Irides of *alius* are assumed to be yellow based on iris colour of most related taxa. Original painting by Larry B. McQueen.

A new Scops-owl from Great Nicobar Island

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A single red-morph Scops-owl collected on Camorta, central Nicobar Islands in 1873 formed the basis for the 1876 description of *Ephialtes nicobaricus* Hume, and a second, nearly uniform rufous specimen was obtained from the same island in 1874 (Gurney 1884). The taxon was treated as a racial synonym of *Otus sunia modestus* or *O. s. malayanus* by some, and by others as a subspecies of Stresemann's (1925, 1939) extremely varied, nearly worldwide *O. scops*. No further Scops-owls were reported from the Nicobars until one was collected on Great Nicobar in 1966 (see Plate 3, upper left). Ali & Ripley (1969: 265) footnoted this specimen as *O. s. nicobaricus*, observing that it was '... considerably larger than *modestus* ... with which Peters (1940) would synonymize it.' Abdulali (1972: 106) noted it 'does not agree with the original description ... The wing lacks the white edge common to the other races and the lower belly is also as profusely marked as the breast ... Though required for all races of *O. scops* ... the first primary is not longer than the eighth'. Its long wings led Marshall (1972) to believe the 1966 specimen was not *sunia*, and after a second specimen was collected on Great Nicobar in 1977, Abdulali (1978: 759) stated 'Marshall who has been studying this in detail is sure that it is an undescribed form but cannot decide of what species'.

Marshall's (1978) discovery that dissimilar taxa from widely disjunct islands had similar calls led him to postulate that *Otus magicus* (formerly restricted to Wallacea) is highly polytypic, with '... a history of long flights over oceans and recent colonizations'. He tentatively placed the Great Nicobar bird in an expanded *Otus magicus*, citing '... morphological similarity to *insularis* ...' of the Seychelles. He stated that the unnamed taxon lacks eartufts, provided a brief partial description (but no name), and included it with '... taxa of unknown song ... hence of unknown affinities ... listed with a guess as to their possible allocation ...' (Marshall 1978: 17, 32). It has subsequently been treated either as *O. s. nicobaricus* (Ali & Ripley 1981, Ripley 1981) or *O. magicus* (Marshall & King 1988), until it was recently listed as 'Nicobar Scops-Owl *Otus* sp.' (King 1997: 26).

In late 1996, I examined both Great Nicobar specimens, now at the Bombay Natural History Society (BNHS), and that same week both Camorta specimens at The Natural History Museum, Tring, U.K. (BMNH), realizing then that specimens from these two islands were very different. Subsequent comparison with all specimens of each taxon in the *manadensis* superspecies (Marshall 1978) in the museums listed in the Acknowledgements has led to confirmation that the unnamed *Otus* is distinct morphologically in a number of characters. Given this, its isolation (Fig. 1), and an emerging pattern of high geographic differentiation among island *Otus*, the Great Nicobar bird cannot be



Figure 1. Map of islands supporting Asian taxa of *manadensis* superspecies. Abbreviations are: *siao(ensis)*; *alviv(enter)*; *me(udent)*; *mana(ensis)*; *temp(estat)*; *sula(ensis)*; *eng(ensis)*; *kali(dupae)*; *insul(aris)*; *bec(carii)*; *bote(ensis)*; *calay(ensis)*; *cuy(ensis)*; *romb(omis)*; *mantan(ensis)*; *sib(utuensis)*; and *interp(ositus)*.

specifically aligned with *magicus* or any other taxon, but requires recognition as a distinct species.

NICOBAR SCOPS OWL *Otus alius*, sp. nov.

Holotype. Bombay Natural History Society No. 22578, adult male (see Plate 3, upper left) from Campbell Bay, Great Nicobar Island, 7°00'N, 93°50'E, India; collected 3 March 1966 by Humayun Abdulali.

Diagnosis. A medium-sized *Otus* with predominantly warm brown, mostly unstreaked and finely barred plumage; ear tufts evenly and finely barred, rounded, and of medium length; facial disk indistinctly paler than rest of plumage, lightly barred at its lower edge; dark border to facial disk not prominent; bill medium-sized and mostly brownish; white scapular spots rounded, nearly restricted to outer web, with broad black tips; most distal portion and much of rear edge of tarsus bare; toes and claws relatively large.

Otus alius is closest in morphology to some members of the *manadensis* superspecies of Marshall (1978), from all of which it differs in possessing scapular spots that are bordered above and below by broad black bands, giving a rounded shape to the white centres. It differs additionally from adults of all Asian taxa in possessing a combination of finely barred overall plumage, entirely lacking streaks above, and having a marked reduction of ventral streaking, over which the heavy tricoloured barring predominates; and in having relatively large claws. Although sample size is insufficient for statistical testing, its wing formula differs from all taxa Marshall (1978) placed in *magicus* (but not *O. enganensis* or *O. umbra*) in that P3 (from outermost) is longer, while the inner secondaries are shorter (Table 1), and like the latter two only, the bill is mostly brownish. Additional differences are given in the 'Remarks' section.

Distribution. Both specimens were collected near sea level at Campbell Bay, Great Nicobar Island. There are no other published reports of Scops-owls from Great Nicobar.

Description of the holotype. Capitalized colours are from Smithe (1975); colour comparisons were made under weak fluorescent light, with diffused sunlight from an open window.

Sides of forehead above supercilium finely barred Cinnamon (39), whitish, and Burnt Umber (22); base of central crown feathers Clay Color (26), central streaks Fuscous (21); base of poorly-marked whitish supercilium feathers paler than Cinnamon, with narrow, widely-spaced Burnt Umber bars; base of ear tufts Cinnamon, narrowly barred Dark Grayish Brown (20); ear tufts rather short, prominent, with broad feather tips; bases of facial feathers at sides of bill more rufescent than Cream Color (54); bases of rictal bristles Buff-Yellow (53), at least tips blackish; short feathers below and in front of eye vaguely dark-barred with pale Cream Color bases; facial disk behind eye Cinnamon with whitish shafts and dusky mottling, rear and lower portion whitish with fine Dark Grayish Brown barring and mottling, narrow, indistinct disk rim Dark Grayish Brown on lower and rear edges; only slight extensions to rear auriculars despite fresh plumage; chin feathers

coloured as feathers at bill sides; throat pale buff with fine dark barring near tips of longer chin feathers. Rest of crown, nape, and hindneck like central crown, but with streaking becoming obsolete and narrow dark bars prominent on rear crown.

Mantle through lower back close to Raw Umber (23) in aspect, dark bars ca. 2 mm wide, slightly paler than Fuscous, light bars ca. 1.7 mm wide, mostly Cinnamon but paler near bases. Scapular spots rounded, mainly white encircled by Dark Grayish Brown (blackish) bands, and surrounding base colour Amber (36), with fine Burnt Umber markings, scapulars Cinnamon near bases. Tertiaries have broad (ca. 4.1 mm) indistinct bands between Fuscous and Olive-Brown (28) and narrow (ca. 1.3 mm) Smoke Gray (45) bands; largest feathers of alula with bars ca. 2.5 mm, Cinnamon and paler, medium bars ca. 4.0 mm and stippled darker, narrow dark bars Fuscous; outer primary (P1) has lightest bands slightly paler than Cinnamon, medium bands slightly paler than Olive-Brown, and darkest bands Fuscous; light bands paler on inner primaries. Uppertail coverts closest to Raw Umber (23), with fine dark bars of Burnt Umber giving vermiculated aspect, uppertail surface with palest bands of Cinnamon, medium bands finely speckled with dark, giving Olive-Brown aspect, darkest bars Fuscous; banding pattern fairly strong on uppersides of rectrices.

Upper breast Cinnamon with ca. 1.5 mm distinct Fuscous bars distally, ca. 1.2 mm Fuscous shaft streaks; lower breast Cinnamon with narrow bars between Olive-Brown and Fuscous, on breast sides shaft streaks are Fuscous, a few as wide as 2.2 mm, some bars slightly paler than Cinnamon; centre of belly with more white, white bands ca. 4 mm broad, Cinnamon bands ca. 3 mm, blackish bars ca. 0.7 mm, narrow white shaft streaks; tips of bars on lower flanks deteriorate into vermiculations, otherwise they are broad Cinnamon bands with narrow white and fine blackish bars. Undertail coverts rufescent whitish for most of their length but with tips barred as is belly, although rufous bars are closer together. Tarsal feathers mostly Cinnamon with fine Fuscous bars; bare patch on upper hind tarsus, with a narrow bare strip along the upper third, feathering meeting ventrally on medial section; dorsally, feathering ends 8.6 mm short of joint formed by phalanges 1–2 of third digit.

Dried cere dull yellowish-brown; maxilla tip and distal half cutting edge blackish-brown, most of sides of maxilla dull yellowish-brown, base and culmen ridge paler and yellower; mandible dull yellow with cutting edge and base dark brown. Dried toes dark yellowish-brown, claws mostly dusky horn, black distally, grading near bases to paler yellowish-brown. Narrow ring of bare orbital skin blackish. No data on soft part colours of fresh specimens or living birds.

Description of the paratype. The female paratype is similar overall to the holotype, but is slightly larger, more boldly marked, with more white on lower underparts. Dark bands on forehead broader, facial disk slightly darker and more heavily marked behind eye; longest throat feathers with coarser and more widely spaced blackish barrings; mantle more coarsely barred, with larger, whiter spots basally; alula more contrasting; upper breast more strongly marked and lower breast more

TABLE 1

Summary statistics for measurements of *Otus* taxa presented as mean $\pm$ standard deviation, n . l=length, w=width, d=depth. Shortfalls of primary tips from wingpoint: P1 S (outermost), etc.; tarsal feathering measured to joint between first and second phalanges of the third digit

Variable	<i>insularis</i>	<i>alius</i>	<i>umbra</i>	<i>enganensis</i>	<i>albiventris</i>	<i>tempestatis</i>
Culmen (skull)	26.6 $\pm$ 1.6, 6	21.9 $\pm$ 0.3, 2	20.9 $\pm$ 0.6, 2	24.2 $\pm$ 1.6, 4	21.5 $\pm$ 1.1, 24	21.0 $\pm$ 1.3, 12
Culmen (cere)	15.5 $\pm$ 0.5, 3	13.7 $\pm$ 1.3, 2	13.7 $\pm$ 1.3, 2	15.1 $\pm$ 1.1, 4	13.2 $\pm$ 0.9, 24	13.2 $\pm$ 0.6, 12
Maxilla d	8.6 $\pm$ 0.4, 3	7.4 $\pm$ 0.3, 2	6.9 $\pm$ 0.5, 2	8.4 $\pm$ 0.4, 4	7.1 $\pm$ 0.4, 24	6.8 $\pm$ 0.5, 12
Maxilla w	8.9 $\pm$ 1.3, 3	6.7 $\pm$ 0.7, 2	6.8 $\pm$ 0.1, 2	8.0 $\pm$ 0.3, 4	6.6 $\pm$ 0.7, 25	6.2 $\pm$ 0.7, 12
Tuft l	25.7 $\pm$ 2.1, 5	20.4	17.6 $\pm$ 2.4, 2	18.6 $\pm$ 0.6, 4	30.4 $\pm$ 3.1, 25	21.4 $\pm$ 2.9, 12
Wing l	166.0 $\pm$ 4.0, 6	163.5 $\pm$ 3.5, 2	144.0 $\pm$ 1.4, 2	162.7 $\pm$ 2.5, 3	156.4 $\pm$ 6.0, 21	151.9 $\pm$ 4.4, 12
P1 S	37.2 $\pm$ 3.7, 6	36.6 $\pm$ 1.8, 2	28.9 $\pm$ 4.3, 2	42.9 $\pm$ 4.4, 2	36.1 $\pm$ 4.7, 20	38.7 $\pm$ 3.3, 12
P2 S	13.0 $\pm$ 1.5, 6	12.5 $\pm$ 1.5, 2	9.5 $\pm$ 0.7, 2	13.0 $\pm$ 1.1, 3	11.8 $\pm$ 2.0, 21	13.6 $\pm$ 1.9, 12
P3 S	3.3 $\pm$ 1.6, 6	1.6 $\pm$ 0.8, 2	1.5 $\pm$ 0.0, 2	2.6 $\pm$ 0.8, 3	2.7 $\pm$ 1.2, 21	3.9 $\pm$ 0.8, 12
P4 S	0.0 $\pm$ 0.0, 5	0.0 $\pm$ 0.0, 2	0.0 $\pm$ 0.0, 2	0.0 $\pm$ 0.0, 3	0.1 $\pm$ 0.4, 22	0.1 $\pm$ 0.3, 12
P5 S	1.4 $\pm$ 1.2, 5	2.7 $\pm$ 0.3, 2	3.6 $\pm$ 1.7, 2	3.1 $\pm$ 0.7, 3	1.0 $\pm$ 1.4, 20	0.5 $\pm$ 0.7, 11
P6 S	8.2 $\pm$ 2.8, 6	9.8 $\pm$ 1.4, 2	12.2 $\pm$ 0.3, 2	12.5 $\pm$ 1.8, 3	6.9 $\pm$ 1.6, 19	6.9 $\pm$ 1.8, 12
P7 S	15.1 $\pm$ 3.6, 6	19.4 $\pm$ 1.2, 2	19.4 $\pm$ 0.6, 2	20.5 $\pm$ 2.0, 3	15.0 $\pm$ 2.4, 19	14.1 $\pm$ 1.8, 12
P8 S	22.3 $\pm$ 2.2, 6	28.0	24.6 $\pm$ 0.8, 2	26.8 $\pm$ 3.7, 3	22.0 $\pm$ 2.6, 18	22.4 $\pm$ 2.0, 12
P9 S	26.6 $\pm$ 2.7, 6	33.6	29.9 $\pm$ 1.3, 2	33.1 $\pm$ 4.6, 3	29.1 $\pm$ 2.9, 17	30.1 $\pm$ 2.4, 12
P10 S	31.5 $\pm$ 2.7, 6	39.3	38.8 $\pm$ 6.8, 2	40.5 $\pm$ 3.2, 3	35.8 $\pm$ 3.2, 15	35.9 $\pm$ 2.1, 12
Tail l	74.6 $\pm$ 5.3, 5	75.8 $\pm$ 2.0, 2	60.2 $\pm$ 0.6, 2	77.3 $\pm$ 3.6, 3	73.0 $\pm$ 3.6, 24	74.2 $\pm$ 3.0, 12
Central rectrix w	15.6 $\pm$ 0.8, 4	19.2 $\pm$ 0.2, 2	13.9 $\pm$ 1.8, 2	18.4 $\pm$ 1.3, 4	17.5 $\pm$ 2.0, 22	14.5 $\pm$ 1.8, 12
Tarsus l	34.0 $\pm$ 1.3, 6	29.1 $\pm$ 0.7, 2	25.4 $\pm$ 0.6, 2	27.7 $\pm$ 2.6, 4	27.9 $\pm$ 1.7, 24	27.4 $\pm$ 1.7, 12
Midclaw l	12.3 $\pm$ 0.5, 6	12.2 $\pm$ 0.6, 2	10.1 $\pm$ 0.4, 2	11.7 $\pm$ 0.7, 4	10.3 $\pm$ 0.7, 25	9.0 $\pm$ 0.7, 11
Midclaw d	2.8 $\pm$ 0.2, 6	2.5 $\pm$ 0.0, 2	1.7	2.3 $\pm$ 0.1, 4	2.4 $\pm$ 0.3, 22	2.3 $\pm$ 0.3, 11
Midclaw w	3.1 $\pm$ 0.2, 6	2.6 $\pm$ 0.3, 2	1.8	2.7 $\pm$ 0.1, 4	2.4 $\pm$ 0.2, 22	2.2 $\pm$ 0.2, 11
Tarsal feathering	26.5 $\pm$ 1.9, 6	8.6 $\pm$ 0.7, 2	7.2 $\pm$ 0.6, 2	7.1 $\pm$ 3.3, 4	5.3 $\pm$ 1.6, 25	4.7 $\pm$ 1.3, 12

TABLE 1
Continued

Variable	<i>manadensis</i>	<i>staoensis</i>	<i>mendeni</i>	<i>kalidupae</i>	<i>sulaensis</i>	<i>Moluccan magicus</i>	<i>beccarii</i>
Culmen (skull)	20.0 ± 0.9, 45	19.9	21.2 ± 0.4, 3	23.9 ± 0.6, 2	24.6 ± 1.3, 2	24.4 ± 2.0, 100	26.7
Culmen (cere)	12.8 ± 0.7, 44	14.9	13.6 ± 0.2, 3	15.3 ± 1.9, 2	15.9 ± 0.7, 2	15.5 ± 1.6, 100	16.2
Maxilla d	6.7 ± 0.5, 47	6.6	7.0 ± 0.7, 3	8.7 ± 0.1, 2	8.3 ± 0.3, 2	8.3 ± 0.8, 103	8.4 ± 0.4, 2
Maxilla w	6.1 ± 0.6, 45	5.7	6.3 ± 0.7, 3	8.3 ± 0.1, 2	6.9 ± 0.1, 2	7.4 ± 0.8, 103	7.8 ± 0.6, 2
Tuft 1	24.5 ± 3.5, 45	18.2	23.3 ± 1.1, 3	23.4 ± 5.4, 2	23.8 ± 1.9, 2	26.6 ± 3.6, 102	25.5 ± 0.1, 2
Wing 1	151.0 ± 4.6, 47	127	146.5 ± 4.1, 3	168.0 ± 0.0, 2	167.0 ± 8.5, 2	171.6 ± 10.8, 98	172.0 ± 2.8, 2
P1 S	36.2 ± 3.9, 40	28.2	37.4 ± 2.5, 3	37.9 ± 2.2, 2	37.4 ± 2.2, 2	38.7 ± 4.2, 68	39.2
P2 S	12.3 ± 3.0, 43	14.3	14.7 ± 0.6, 3	13.2 ± 1.5, 2	14.5 ± 1.3, 2	14.2 ± 2.8, 71	12.7 ± 2.2, 2
P3 S	2.8 ± 1.4, 43	6.0	4.0 ± 0.4, 3	0.8 ± 1.1, 2	3.5 ± 0.2, 2	3.9 ± 1.4, 69	2.9 ± 0.6, 2
P4 S	0.1 ± 0.3, 44	0.0	0.6 ± 1.0, 3	0.3 ± 0.5, 2	0.0 ± 0.0, 2	0.1 ± 0.4, 71	0.0 ± 0.0, 2
P5 S	2.0 ± 1.7, 38	—	0.2 ± 0.3, 3	1.3 ± 0.3, 2	1.3 ± 0.1, 2	1.1 ± 1.4, 66	1.3 ± 1.9, 2
P6 S	8.2 ± 2.6, 36	8.5	5.0 ± 0.1, 3	6.5 ± 1.2, 2	6.3 ± 1.7, 2	6.8 ± 2.1, 61	5.4 ± 0.8, 2
P7 S	14.8 ± 2.8, 39	15.1	11.9 ± 1.4, 3	14.1 ± 2.0, 2	14.7	14.3 ± 2.6, 58	12.2 ± 0.1, 2
P8 S	23.1 ± 2.8, 35	20.3	18.0 ± 0.7, 3	21.8 ± 2.7, 2	21.4	22.2 ± 2.7, 58	20.6 ± 0.8, 2
P9 S	29.3 ± 2.9, 33	27.3	24.3 ± 1.6, 3	28.0 ± 1.8, 2	29.0	29.6 ± 3.2, 55	—
P10 S	35.9 ± 2.9, 33	36.9	29.6 ± 0.6, 3	33.2 ± 3.8, 2	34.2	36.8 ± 3.5, 50	—
Tail 1	70.7 ± 3.9, 41	57.1	65.0 ± 1.3, 3	82.0 ± 0.4, 2	75.8 ± 2.0, 2	80.7 ± 6.4, 95	81.8 ± 2.6, 2
Central rectrix w	15.0 ± 2.3, 39	13.0	14.4 ± 0.7, 3	18.5 ± 1.4, 2	19.2 ± 0.2, 2	18.0 ± 1.8, 79	18.4 ± 0.8, 2
Tarsus 1	26.8 ± 1.7, 45	26.8	26.7 ± 1.2, 3	33.2 ± 0.0, 2	29.1 ± 0.7, 2	31.6 ± 2.8, 97	33.8 ± 0.1, 2
Midclaw 1	10.4 ± 0.5, 43	10.1	10.9 ± 1.1, 3	11.5 ± 0.8, 2	12.2 ± 0.6, 2	11.9 ± 1.2, 97	12.0 ± 0.0, 2
Midclaw d	2.1 ± 0.2, 46	1.9	2.2 ± 0.1, 3	2.5 ± 0.1, 2	2.5 ± 0.0, 2	2.6 ± 0.2, 90	2.5 ± 0.2, 2
Midclaw w	2.3 ± 0.2, 46	2.1	2.3 ± 0.1, 3	2.6 ± 0.1, 2	2.6 ± 0.3, 2	2.7 ± 0.3, 96	2.7 ± 0.1, 2
Tarsal feathering	5.4 ± 2.0, 42	4.5	14.9 ± 1.4, 3	5.1 ± 1.8, 2	17.2 ± 1.8, 2	8.8 ± 3.7, 94	8.8 ± 4.6, 2

variegated; flanks have white bands broadest and blackish bands heavier; upper tail more coarsely speckled, less banded; primaries with pale bands lighter; tarsal feathering paler and more speckled. Both types resemble each other more closely than either does any specimen examined of other taxa.

Measurements of the holotype (mm). Wing, flattened and straightened (161.0); central rectrix (74.4); tarsus (28.6); culmen from skull (21.7); culmen, from anterior edge of cere (12.8). For additional measurements and those of related species, see Table 1; sample sizes are insufficient for statistical testing.

Specimens. Great Nicobar: BNHS (holotype); BNHS 24411 (♀; paratype) from type locality (formerly Zoological Survey of India [ZSI] No. 33171, collected 2 April 1977 by S. S. Saha for K. K. Tiwari).

Etymology. The name *alius*, which is Latin for 'other' (this being another Scops-owl from the Nicobar Islands), encapsulates the family name of Mr Humayun Abdulali, who first collected this species, and contributed a great deal to Indian ornithology, and in particular that of the Andaman and Nicobar islands. The common name 'Nicobar Scops-Owl' is appropriate and already in use solely for this taxon (King 1997: 26).

Remarks

Additional differences

From *O. beccarii* ($n=2$ specimens examined and measured, and photographs of type; Biak I.), *alius* differs greatly by its less contrasting, paler, browner, less fluffy plumage; mantle more definitely barred; more slender bill; streaked forecrown; more definite eartufts; less distinct facial disk; somewhat streaked below; primary coverts and alula not dark and unmarked; and shorter, more prominently banded tail. The highly isolated *Otus beccarii* is so distinct in plumage that even Stresemann (1925) and Mayr & Meyer de Schauensee (1939) gave it specific status, while Marshall (1978) lumped it in *magicus* without examining specimens until his manuscript was in proof.

From *Otus insularis* (Seychelles, $n=6$; colour plate of type, Tristram 1880), *alius* differs markedly in its much smaller size, especially skull and bill (Table 1); less prominent dark eye patch; eartufts not mainly buffy and blotched; less rufflike head feathers; less prominent facial disk edge; lack of buff-spotted hindcollar; scapular spots not narrowly black-edged and lined; relatively longer wings; much shorter, sligher, more extensively feathered tarsi; and relatively longer tail with broader central rectrices (Table 1). *Otus insularis* diverges most from *alius* of any of the taxa considered here in its very heavy streaking below and heavy blotching above. All adult specimens and photos of three live birds are similar, but differ from other '*magicus*' taxa, and *insularis* is separated by so great a distance (Fig. 1) that others regard it as distinct (Watson 1980, Collar & Stuart 1985). Originally described in a monotypic genus (Tristram 1880), it has even been considered a '*bakkamoena* offshoot' (Peters 1940: 97).

Otus alius differs from *O. [magicus] sulaensis* (see Plate 3, lower right; Sula Islands, $n=2$) in its much more extensively feathered tarsus; less

prominent dark eye patch; less heavily barred auriculars and spotted lower throat; shorter bill (Table 1); more uniformly barred brown dorsum lacking spots and streaks; more evenly spaced bands on outer webs, and light banding on inner webs of outer primaries; scapular spots lacking large black central patches; more prominently banded tertials and upper tail, and smaller size. Judging from its highly distinctive vocalizations and morphology, *sulaensis* is probably a separate species (Hartert 1898, Finsch 1898, Coates & Bishop 1997, King 1997) but only two adult specimens exist.

For three other taxa from islands off Sulawesi (for which the combined world total of adult specimens is only six!), vocalisations are unknown and the taxonomy unsettled. From *O. [m.] kalidupae* (see Plate 3, lower left, Tukangbesi; $n=2$), *alius* differs in its darker brown colouration; less extensive tarsal feathering; less vermiculated venter; less finely patterned eartufts; more prominently banded upper tail; very different scapular spots; less strongly banded undersides of primaries, but stronger banding of uppersides; and smaller overall size (Table 1). From *O. [m.] mendeni* (Peleng I.; $n=3$; Eck 1976), *alius* differs in its less vermiculated and unspeckled dorsum (in grey morph); much longer tail and especially wing; less streaked and more barred venter; and much more extensive tarsal feathering (Table 1). From the unique specimen of *O. [m.] siaoensis* (Siau I. in Sangihe Is.; Schlegel 1873), *alius* differs in its much larger size, especially wings and tail; its lack of a conspicuous pale ochre collar; its much broader tail banding (Table 1); and its less richly coloured, more regularly barred venter.

Otus magicus sensu latu

Additionally to the characters listed above and below, *Otus alius* differs from most of the remaining races of *magicus* in having the tertials less broadly and prominently banded. It is about the size of the two small Lesser Sundas taxa (*albiventris* and *tempestatis*—grey morph of the latter is shown top right, Plate 3) and smaller than the remaining (Moluccan) taxa, samples of which were combined herein, but its feet and claws are relatively large for its size (Table 1). From *albiventris* (Lombok to Lomblen; $n=25$), *alius* differs in its much shorter, more rounded, unstreaked eartufts; shorter, less profuse rectal bristles; and breast more uniform with rest of venter. *Contra* Sibley & Monroe 1993, *O. alfredi* (Flores; $n=3$) is not the red morph of *albiventris*, but belongs to the *O. spilocephalus* group (Hartert 1925, Stresemann 1925, Widodo *et al.* unpublished). From grey-morph *tempestatis* (see Plate, upper right, Wetar I.; $n=6$), *alius* has venter less mealy; less dark above the eye; and more coarsely barred eartufts; and from the red morph of *tempestatis* ($n=6$), it has narrower pale cinnamon (less orange) barring more prominently black-edged below.

From *O. m. magicus* (Amboina and Scram; $n=24$) *alius* differs greatly in having the dorsum much less heavily spotted pale, and the venter with greatly reduced streaks and much less speckled, lacking bold black markings; scapulars lack irregular black marks. From *Otus m. bouruensis* (Buru; $n=9$), *alius* is darker above, lacks whitish hindcollar, has more regular barring on primaries; less narrowly barred tail; paler eyepatch;

ear tufts more barred; scapular spots smaller; and underparts browner, lacking strong, sharp streaks. From *O. m. leucospilos* (Halmahera and Bacan, $n=23$), *alius* has a less pronounced facial disk; less white spotting and more even patterning below, without strong contrast between breast and belly; less uniform dorsum, lacking streaks; shorter ear tufts; and rather different scapular spots; *O. m. obira* (Obi, $n=1$ specimen examined and photos of type seen) resembles a rather dark *leucospilos*. From *O. m. morotensis* (Ternate and Morotai, off Halmahera; $n=21$), *alius* differs essentially as from *leucospilos* but is also paler. Another form attributed to *magicus* (Wolters 1970; not mentioned by Marshall 1978), *O. m. obsti* Eck 1973, is probably a mislabelled *manadensis* (Lambert & Rasmussen unpublished).

Eastern Indian Ocean endemics

Otus alius differs greatly from *O. enganensis* (Enggano Island; $n=4$ specimens examined, and photos of 3 others) in being less rufous and more barred, with less streaking below and less vermiculation above; scapular spots smaller with larger, blacker tips; ear tufts less finely barred; tertials and tail more banded; bill smaller; toes heavier; and tarsi less thickly feathered. The rather distinctive calls of *enganensis* suggest it is a separate species (van Marle & Voous 1988, King 1997), and this is here considered warranted as its plumage is very unlike *magicus*. *Otus alius* differs from the much smaller (but geographically nearest) *O. umbra* (Simeulue I.; $n=2$) in its less rufescent plumage overall; paler facial disk; barred ear tufts; larger black tips to whiter scapular spots; broader pale bands on upper tail surface; and proportionately much larger feet and claws. The vocalisations of *umbra* are very distinct (Marshall 1978) so that, despite its similarity in plumage (but not size and proportions) to *enganensis*, its specific status is not in doubt. A closer relationship of *alius* with *enganensis* and *umbra* than with *magicus* is suggested by their shared wing formulae (Table 1; unpubl. data) and bill colouration, qualitatively unlike those of all Wallacean *magicus* subspecies, as well as *sulaensis*, *beccarii*, and *insularis*. Although *O. mentawi* (Mentawai Is.; $n=7$ specimens examined, photos of another) has been thought a member of the *magicus* group (Neumann 1939, Eck & Busse 1977), it is much closer to *O. bakkamoena* (Riley 1929, Deignan 1950) and is treated as a separate species by most on the basis of its highly distinctive vocalizations.

Marshall (pers. comm. 1997) thought the Nicobar Scops-Owl must be the same taxon as a pair of owls that apparently bred in 1976 on Pulo Perak, off N.E. Sumatra, and the latter were listed in *Otus magicus* in Marshall & King (1988), and as 'Small-Island Scops Owl *Otus* sp.' (Wells 1983). However, photos of two of the Perak owls taken by M. Avery (no specimens exist) show them to be very different from all these taxa, differing from *alius* in their long, pointed, speckled ear tufts; heavily streaked forehead and underparts; much white on lower underparts; both webs of scapulars largely white with small triangular black tips; white feathering on thin legs, with distal third bare; and relatively much smaller feet and claws.

The Pulo Perak birds show no salient differences in plumage from the type of *Otus sunia nicobaricus*.

Other taxa

From the variable *O. manadensis* (Sulawesi; $n=47$), *alius* differs by the same plumage and proportional characters as those by which it differs from the Lesser Sundas *magicus* forms, except that the banding of the tertials is similar; *alius* has the breast more similar to the lower underparts; lacks black spotting and pale rufous bases to eartufts; has auriculars paler; usually broader pale tail bands; paler central forecrown; larger claws; and smaller rounded white scapular spots. Sangihe Island *Otus* ($n=3$) have been thought identical to *manadensis* (Sharpe 1875, Meyer 1884, Finsch 1898), and differ essentially from *alius* as does *manadensis*; they will be dealt with elsewhere (Lambert & Rasmussen unpublished).

From Japanese and Taiwanese taxa (*O. e. elegans*, Ryukyu and Amami Is.; $n=15$; *botelensis*, Lan Hsü I.; $n=1$ specimen, photos of 6 additional specimens and one living bird examined; and *interpositus*, Borodino Is.; no specimens examined but photos of 6 specimens seen) *alius* differs greatly in its wing formula; shorter wings; less finely vermiculated but more uniformly coloured plumage; shorter, barred eartufts lacking rufous inner webs; broader pale tail bands; and lack of small black markings in scapular spots. From *O. [elegans] calayensis* (Batanes and Calayan, Philippines; $n=4$), a few individuals of which *alius* somewhat resembles due to their barred mantles, it differs in being browner; with barred eartufts lacking rufous edges; less heavy, less finely barred tarsal feathering; less conspicuous streaking and more tricoloured barring below; less uniform uppertail surface and tertials; tail shorter; and less uniform, less ochraceous facial disk. From the Philippine taxa of *O. mantananensis* (*cuyensis*, $n=3$; *romblonis*, 5; *sibutuensis*, 13; *steerei*, 1; and *mantananensis*, 2 specimens examined and photos of another), *alius* has narrower breast streaking; more tricoloured barring of venter; unstreaked lower throat; and prominently banded upper tail and tertials (similar to the nominate form); there are additional differences from each individual taxon as well. None of the African taxa in the *manadensis* superspecies are as similar to *alius* as are some of the taxa treated above, and hence they are not dealt with here, although all were examined for this study.

Life history data

The holotype had greatly enlarged testes (26×14 mm) when collected on 3 March. The paratype was noted to have the 'ovary granular' but an accompanying drawing showed it to be approaching breeding condition (ca. 10 mm long, largest follicle ca. 1 mm) on 2 April, although it was moulting the inner primaries (P8-P10) at the time. The holotype, collected as it flew over a clearing, had eaten 'a spider and a beetle (*Apogonia ferruginea* F.)' (Abdulali 1967: 172). The paratype 'was found perching singly on a tree, ca. 50 ft above the ground in the coastal forest, ca. 1 km away from the water line ...'

(B. Biswas *in litt.* to J. T. Marshall, 24 April 1979); its stomach 'contained a mangled 4 inch gecko' (Abdulali 1978: 759).

Voice

The call of the female was rendered by S. S. Saha as 'ooo-m' (Abdulali 1978: 759) or as 'rising long drawn (lasting for 2 to 2.5 s), single syllable melancholic moan, repeated after 3 to 5 s, 'öün' ... pouring out its steady moaning note continuously for more than 30 minutes or so ... at about 2000 hrs ...' (B. Biswas *in litt.* to J. T. Marshall, 24 April 1979). Territorial calls of the male (those used as taxonomic characters by Marshall 1978) are unknown.

Conservation

Since only two specimens are known, from the same place on one island, it may be that *alius* is at some degree of risk. Its possible restriction to Great Nicobar is suggested by the fact that it was not encountered on the more northerly Nicobars despite the more extensive collecting done there (Hume 1873, Butler 1899–1900, Richmond 1902).

Prior to collection of the first *alius*, the only collecting on Great Nicobar was apparently 2–3 days by A. O. Hume's party (Hume 1873) and under a month by W. L. Abbott (Richmond 1902). However, the Great Nicobar group includes the nearby Little Nicobar (Stattersfield *et al.* 1998), which is also little-known, so *alius* may occur there, and surveys are urgently needed to establish the status of *alius*. In any case, now that this well-marked, highly isolated taxon has finally received a name, the process of studying and conserving it can commence.

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